

## Supplementary Material

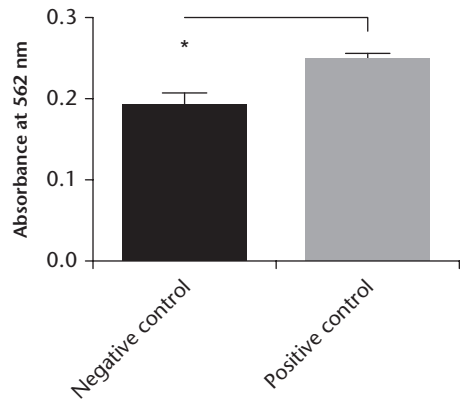


Fig. aa

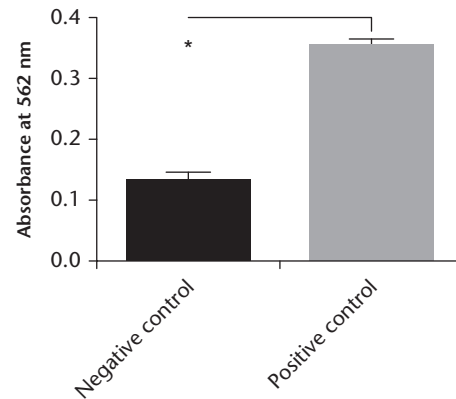


Fig. ab

Alizarin Red staining of control groups. Alizarin Red staining confirms the efficacy of osteogenesis in both a) male and b) female coculture models, as the positive control groups showed significantly higher bone mineralization than the negative control groups in both male and female cells. \*Statistically significant difference from groups indicated by black bars.

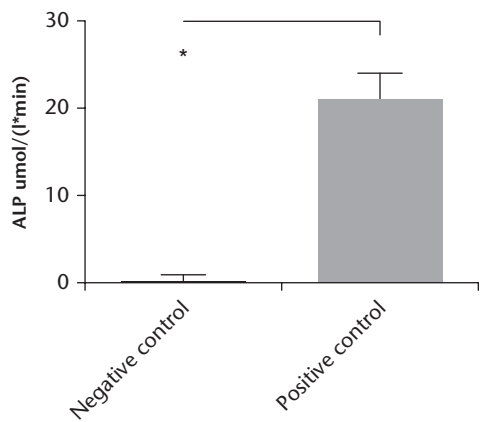


Fig. ba

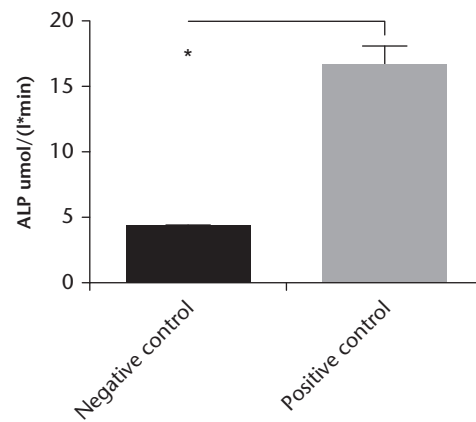


Fig. bb

Alkaline phosphatase (ALP) activity in control groups. ALP activity measured in negative and positive control groups confirms little to no ALP activity in the negative control groups and significantly greater ALP activity in the positive control groups; this is true for both a) male and b) female coculture systems. \*Statistically significant difference from groups indicated by black bars.

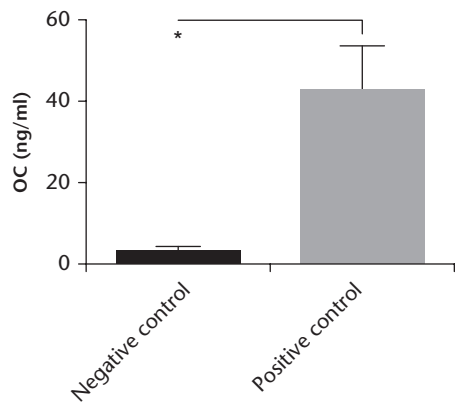


Fig. ca

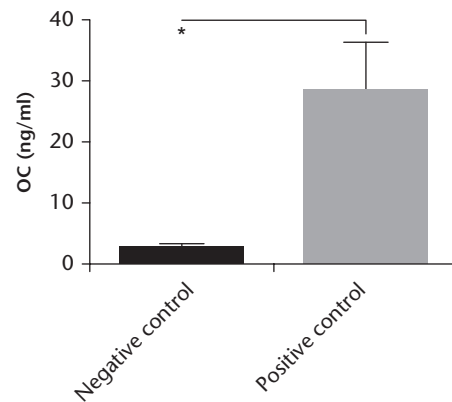


Fig. cb

Osteocalcin secretion via enzyme-linked immunosorbent assay (ELISA) in control groups. Osteocalcin secretion measurements confirm little to no osteocalcin secretion in the negative control groups and significantly greater secretion activity in the positive control groups; this is true for both a) male and b) female coculture systems. \*Statistically significant difference from groups indicated by black bars.